



Chapter

6

Municipal Solid Waste

Municipal Solid Waste - Current City of Falls Church Management System, Anticipated Gaps in Waste Management, and SWMP Actions

This chapter presents the process used by the City to evaluate the current SWM system, project the future waste stream, identify anticipated gaps in waste management, and select SWMP actions for MSW.

This chapter presents the evaluation of the City's current and projected solid waste management (SWM) activities for municipal solid waste (MSW), organized by the SWM hierarchy. It uses the hierarchy as the framework for determining how to bridge the gaps between the current SWM activities and the strategies needed to manage the City's MSW in the future. The chapter then presents the City's Solid Waste Management Plan (SWMP) actions for MSW over the next 20 years to address those gaps.

Using the SWM hierarchy, the City of Falls Church staff worked in cooperation with the City's Solid Waste Management Plan Advisory Committee (SWMPAC) to evaluate current SWM practices, including source reduction and reuse initiatives, recycling activities and programs, future markets for recyclables, collection operations, transfer facilities, and characteristics of solid waste disposal facilities. Next, the City reviewed the current and future projections of its solid waste stream quantities over the SWMP planning period. Using these projections, the City assessed the changes in the solid waste stream over the planning period and identified the critical areas requiring modification. Finally, the City selected SWMP actions that will close the gaps between its current SWM system and that required in the future.

Overview of the 20-Year Plan for the City's MSW Management System

The City's current SWM programs and activities for MSW, the gaps in waste management, and SWMP actions over the SWMP planning period are summarized in Table 6-1. This table is organized by level of the waste

hierarchy, from source reduction and reuse, to recycling, collection, transfer, and disposal. (Note that private companies are responsible for many of the activities in the current and future system.)

Table 6-1. MSW: Current Waste Management Activities, Anticipated Gaps in Waste Management, and SWMP Actions

	Current Programs in the City	Anticipated Gaps	SWMP Actions
Source reduction and reuse	<ul style="list-style-type: none"> Public outreach and education, including recycling block captains Internal City source reduction and reuse initiatives Network of civic groups, charitable organizations and thrift shops City collection of used clothing and textiles Environmental Services Council Business Awards Program 	<ul style="list-style-type: none"> Additional 1,800 to 5,700 tons of MSW generated in the City of Falls Church Need for increased MSW source reduction and reuse to reduce MSW generation quantities 	<ul style="list-style-type: none"> Improve public outreach and education to promote source reduction and reuse Implement a Pay-As-You-Throw collection system Establish a materials exchange Participate in establishment of regional resource exchange programs Monitor and publicize waste generation Implement internal source reduction and reuse programs at City government facilities and schools Promote surplus food distribution programs
Recycling	<ul style="list-style-type: none"> Public outreach and education, including recycling block captains Recycling collection, including the Falls Church Recycling Center Recycling programs and events City recycling program policy administration through City Code, Section 13 Three private MRFs: Capitol Fiber, Recycle America Alliance, and Environmental Recycling, Inc. Electronics recycling program 	<ul style="list-style-type: none"> Additional 930 to 2,930 tons per year of MSW recyclables by 2025 Need for additional recycling collection vehicles and labor Need for increased MSW recycling quantities and rates to reduce burden on waste disposal 	<ul style="list-style-type: none"> Promote public-private recycling programs Improve public outreach and education to promote recycling Increase business recycling by reducing recycling thresholds Implement a Pay-As-You-Throw collection system Encourage increased MSW recycling at City government facilities and schools Revise regulations to enhance recycling: <ul style="list-style-type: none"> Expand recyclables collected at multifamily residences Expand recycling requirements for electronic wastes Consider implementation of single-stream curbside collection system for recyclables Provide tools to promote increased recycling Establish a recycling rate goal Promote establishment of a regional food waste composting facility
Collection	<ul style="list-style-type: none"> Residential curbside and multiunit complex collection MSW citizens disposal drop-off center at Fairfax County's I-66 Transfer Station Commercial collection City government facilities and City school collection 	<ul style="list-style-type: none"> Additional 1,760 to 5,680 tons per year of MSW collection by 2025 Need for additional MSW collection vehicles and labor 	<ul style="list-style-type: none"> Maintain City refuse collection Implement a Pay-As-You-Throw collection system Expand collection of electronic wastes Promote use of special fuels, filters, and special vehicles for collection
Transfer	<ul style="list-style-type: none"> Fairfax County I-66 Transfer Station Three materials recovery facilities (MRFs) for MSW recyclables 	<ul style="list-style-type: none"> Additional 850 to 2,700 tons per year of City-generated MSW handled at the Fairfax County I-66 Transfer Station by 2025 Fairfax County may exceed transfer station capacity between 2020 and 2025 	<ul style="list-style-type: none"> Continue using the current transfer system

Table 6-1 (Continued)

	Current Programs in the City	Anticipated Gaps	SWMP Actions
Disposal	<ul style="list-style-type: none"> – Fairfax County E/RRF as primary disposal method – Fairfax County uses out-of-county sanitary landfills for E/RRF “overflow” waste 	<ul style="list-style-type: none"> – Additional 850 to 2,700 tons per year of City-generated MSW managed by Fairfax County – Fairfax County contract with E/RRF ends in 2011 	<ul style="list-style-type: none"> – Continue using the current disposal system as the preferred alternative – Establish agreements with other jurisdictions for alternative disposal

Source Reduction and Reuse

Current Programs

The City’s current source reduction and reuse initiatives for MSW include:

- promoting internal government initiatives through the City Leadership Program;
- referring citizens to a network of local civic groups, charitable organizations and thrift stores;
- promoting source reduction and reuse through youth programs sponsored by the Environmental Services Council (ESC);
- collection of used clothing and textiles for reuse at the bi-annual Recycling Extravaganza and year-round at the Falls Church Recycling Center and Police Department; and
- rewarding source reduction and reuse efforts through the Business Awards Program.

City Leadership Program

The City of Falls Church government includes the City Leadership Program, which was adopted by the City Council in 1993. The City Leadership Program promotes source reduction and reuse through various policies and internal government initiatives. Policies instituted by the program include:

- all City departments must request two-sided copying and use of recycled paper from prospective contractors in bid specifications, and
- the City must incorporate yard waste reduction practices such as grasscycling and leafcycling into its grounds maintenance contracts.



The City Leadership Program has promoted many internal initiatives to promote source reduction and reuse.

The City’s Employee Task Force on Waste Reduction and Recycling is a seven-member, inter-departmental body that was established through the City Leadership Program. The task force meets monthly and is staffed by the City’s Recycling Coordinator. This group has promoted source

reduction and reuse practices at City government facilities through the following initiatives:

- encouraging the use of electronic communications and transactions to reduce paper use,
- posting reminders on copy machines to encourage double-sided copying,
- sponsoring a “Tip of the Month” program through which task force members suggest various source reduction and reuse practices via e-mail messages and bulletin board displays,
- sponsoring an annual Office Products Swap Meet, through which departments donate their unwanted office products to other departments that can use them,
- sponsoring an annual Book and Video Sale, through which employees donate and purchase used books and videos, raising funds for their annual “Recycling Hero” contest,
- establishing a reuse program for the public library’s discarded books, and
- recommending City policy to require all new copiers and printers purchased by the City to have double-sided printing capability.

The City promotes a network of civic groups, charitable organizations and thrift stores for reuse and resale of clothing, books and household items.



Civic Groups, Charitable Organizations and Thrift Stores

The City of Falls Church refers citizens to a network of civic groups, charitable organizations, and thrift stores for the reuse and resale of books, clothing, and household items. These outlets provide an opportunity for citizens to donate usable items for reuse rather than disposing of them. The City supports these organizations by providing contact information to citizens who call to inquire about disposal of reusable items.

The local organizations to which the City’s Recycling Coordinator most often refers citizens are:

- American Association of University Women (books for annual book sale)
- Falls Church Community Services Council (furniture and household appliances for donation to people in need)
- Falls Church Lions Club (used eyeglasses)
- Service Source (computers)
- Village Preservation and Improvement Society (books and household items for annual rummage sale)

Local thrift stores, consignment shops, and businesses that provide reuse opportunities include:

- Clock Tower (clothing and household items)
- Joseph's Coat (clothing and household items)
- Mailbox Extra (foam packing pieces)
- New to You (fine women's clothing)
- Second Chance (clothing and household items)



Environmental Services Council (ESC)

The Environmental Services Council (ESC) consists of a nine-member, City Council-appointed executive committee and task groups, including the Education Task Group and Cleanup Task Group. The ESC Executive Committee serves as an advisory body to City Council. The Executive Committee and task groups meet monthly and are staffed by the City's Recycling Coordinator. ESC source reduction and reuse programs include:

- *Recycling Extravanzas.* The ESC and other citizen volunteers staff the bi-annual "Recycling Extravanzas," which promote source reduction and reuse in the City of Falls Church.
- *Operation EarthWatch.* This program for elementary students, sponsored by the ESC Education Task Group and supported by local businesses and civic groups, encourages environmental awareness and action in the following five program areas:
 - recycling/reuse
 - waste reduction
 - water conservation
 - energy conservation
 - nature care

The program was established in 1993. Schools involved are Mt. Daniel Elementary, Thomas Jefferson Elementary, and St. James Catholic School. Participation runs from



October through March. During these months, students perform activities at home and in the community that demonstrate Earth stewardship. Students who complete activity sheets for all six months receive special t-shirts to recognize their sustained efforts. In addition, six-month EarthWatchers are eligible to march with the EarthWatch group in the City's Memorial Day Parade.

Over 1,000 students and their families have participated in the EarthWatch program, most for several years. Students who participate in EarthWatch throughout their elementary school years receive the Lions Club EarthWatch Award and have their names inscribed on a plaque. Operation EarthWatch maintains a website at www.geocities.com/operationearthwatch/.

Sample EarthWatch activities in the areas of reuse and waste reduction include the following:

- taking extra clothes hangers to the local dry cleaners,
 - purchasing thrift store items for birthday or holiday gifts,
 - reusing gift wrap for various projects,
 - making holiday costumes from “found” materials,
 - making cloth napkins out of used fabric,
 - making message pads from used paper,
 - using non-toxic cleaning alternatives,
 - packing “waste-free” lunches, and
 - using coffee grounds as compost.
- *The Thomas Jefferson School Ecology Club.* The Ecology Club focuses on the value of organic material (leaves, woody waste, and garden trimmings) as a medium for absorbing rainwater and producing soil nutrients. Students are actively involved in source reduction and reuse activities that involve organic material, including mulching, composting, and vermicomposting. The club, which meets weekly throughout the school year, is sponsored by the ESC Education Task Group and directed by the City’s Recycling Coordinator.



Collection of Used Clothing and Textiles

The City of Falls Church collects used clothing and textiles at the bi-annual Recycling Extravaganza and year-round at the Falls Church Recycling Center.

Recycling Extravaganza

The City of Falls Church collects used clothing and textiles during its spring and fall “Recycling Extravaganzas,” which are co-sponsored by the City’s Department of Environmental Services and the ESC. These one-day collection events are held at the Falls Church Recycling Center. Usable clothing and textiles are donated to the Clothing Recycling Company (CRCO) for distribution to local charities; unusable textiles are

either recycled by CRCO or donated to the City's animal warden for use in the local animal rescue program.

Used bicycles are also collected at the Recycling Extravanzas and donated to Pedals for Progress, a non-profit organization that refurbishes and sends the bicycles to people in developing countries.



Falls Church Recycling Center and Police Department



The City provides space for a CRCO collection container at the Falls Church Recycling Center for year-round collection of clothing and textiles. In addition, a collection box is located at the entrance to the Falls Church Police Department for donations of unusable textiles for the local animal rescue program.

Business Awards Program

In partnership with the Falls Church Economic Development Authority and the Falls Church Chamber of Commerce, the ESC co-sponsors the City's annual Business Awards Program. One of the seven awards is presented in the category of Environmental Protection, presented to one business each year. Criteria for selection include business practices that demonstrate a commitment to waste reduction. Awardees are recognized by City Council and other community leaders during an annual Business Awards Ceremony, and through a special edition of "Marketplace," produced by and broadcast on the local cable station.

The City promotes source reduction and reuse through a variety of media targeted to reach all City citizens.

Public Outreach and Education - Source Reduction and Reuse

The City of Falls Church promotes source reduction and reuse through its public outreach and education efforts, which include articles in local publications, banners and media, informative literature, press releases and public service announcements, the City website, and the Falls Church Environment Website. (Public outreach and education efforts are discussed in more detail later in this chapter.)

Assessment of Current and Future Source Reduction and Reuse Needs

Calculating the quantities of solid waste that are reduced prior to entering the waste stream is problematic. Therefore, the City does not develop source reduction and reuse projections for solid waste.

The City of Falls Church attempts to follow the waste management hierarchy in designing its SWM system. The City prefers source reduction followed by reuse and recycling to disposal of solid waste. The SWM Program goal is to implement new programs that will maximize the